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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SORKIN, DAVID L

ART UNIT PAPER NUMBER

1723

DATE MAILED: 09/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,459

Applicant(s)

LI PRETI ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 10 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to because, in Fig. 3, the reference character "P" should instead be - - D - -. See paragraph [19] of the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The specification is objected to because the reference character "44" is used to designate both the "inner diameter" of the mixing chamber and the "plunger". In the drawings, "44" appears to designate only the "plunger". It is suggested that all instances of "44" which refer to the inner diameter be deleted from the specification. See paragraphs [19] and [20] of the specification. While applicant could add an appropriate reference character to the drawings to indicate the inner diameter, this is optional because one would readily understand what the inner diameter of the mixing chamber is without a reference character.

3. In paragraph [23] of the specification, line 4, "miser" should read - - mixer - -.

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Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.75(f) which states:

"If there are several claims, they shall be numbered consecutively in Arabic numerals".

The instant claims include two claims numbered "3". The claims have been renumbered in the following manner:

<u>As presented</u>	<u>As renumbered</u>
1 and 2	1 and 2
3 (the first one)	3
3 (the second one)	4
4-16	5-17

The claim presented as "claim 4" has been renumbered so as to depend from the second claim presented as "claim 3". In response to this office action, applicant should provide a complete set of claims properly numbered. All claim numbers mentioned herein below are as renumbered, unless otherwise indicated.

Suggestions

5. It is suggested that in claim 10, "said exit port" read - - said outlet port - - to make more clear that the port recited in claim 1 as "an outlet port" is being referenced.

Although one of ordinary skill in the art would understand that "said exit port" refers to the "outlet port", it is suggested that the above change be made to make the claim more clear. Likewise, it is suggested that in claim 17 "exit port" read - - outlet port - -.

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6. Also in claims 10 and 17, while one of ordinary skill in the art would understand that "said mixer" refers to the rotatable mixer, the claims would be more clear if "said mixer" was changed to - - said rotatable mixer - -.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 8, 9 and 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

9. Claims 8 and 9 are rendered indefinite by the phrase "said axis rotatably driving said mixer", recited claim 8. It is considered that an axis is merely a set of point and is not capable of "driving". In the instant case, "said axis" refers to the axis of a mixing chamber which is not disclosed to be rotatable, making the scope of the claim especially unclear. It is suggested that "said axis" be changed to - -said shaft - -.

10. In claim 11, there is lack of antecedent basis for "said fixed mixer". It is unclear if a fixed mixer is a required element of the claim. It appears that claim 11 should depend from claim 10, rather than claim 1, because claim 10 recites "a rotationally fixed mixer".

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Note: regarding the preamble statement of intended use "for a molding system" recited in independent claims 1 and 12, "where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation" *Rowe v. Dror*, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

13. Claims 1-9 and 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Solomon (US 5,842,786). Regarding claim 1, Solomon ('786) discloses a mix head assembly comprising a mixer chamber (12,16) having an outlet port (18,19,21), said mixer chamber defining an axis (45, see Fig. 4); a mixer (31) mounted within said chamber, said mixer rotatable about said axis (see col. 3 line 61 to col. 4 line 8); and a plunger (36 which is a component of 30) movably mounted with said chamber (see col. 3, lines 41-48); said plunger movable along said axis to telescope of said mixer (see col. 3, lines 33-48). Regarding claim 2, said mixer comprises a plurality of vanes (46 and optionally 44 or portions thereof) extending perpendicular to said axis. Regarding claim 3, said plurality of vanes extend longitudinally along a longitudinal length of said mixer (see Fig. 6). Regarding claim 4, each of the vanes defines a plurality of steps (one step being "46" and another an adjacent portion of "44"; see Figs. 1, 3b and col. 4, lines 33-39). Regarding claim 5, said plurality of steps are located on one side of each of said plurality of vanes (see Figs. 1, 3b and col. 4, lines 33-39). Note: in claim 5 it is considered that the phrase "steps are located on one side" does not preclude additional

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steps being located in other locations such as another side. Regarding claim 6, said one side of said plurality of vanes lead a direction of rotation of said mixer (see Figs. 1, 3b and col. 4, lines 33-39). Regarding claim 7, an inner configuration of said plunger corresponds with an outer configuration of said mixer (see Figs. 1, 3b and col. 4, lines 33-41). Regarding claim 8, a shaft (60) extends along said axis (see Fig. 6) and drives said mixer. Regarding claim 9, said plunger moves relative to said shaft (see Fig. 4 vs. Fig. 6). The scope of claim 11 is unclear, as discussed above regarding section 112, second paragraph. Solomon ('786) discloses that said container defines an input port (72) (see Figs. 4 and 5). As discussed below under "Allowable Subject Matter", if proper antecedent basis for "said fixed mixer" is provided by making claim 11 depend from claim 10, this rejection will be withdrawn. Regarding claim 12, Solomon ('786) discloses a mix head assembly comprising a mixer chamber (12,16) having an outlet port (18,19,21), said mixer chamber defining an axis (45, see Fig. 4); a mixer (31) mounted within said chamber, said mixer rotatable about said axis (see col. 3 line 61 to col. 4 line 8); a plurality of vanes (46 and 44 or portions thereof) extending perpendicular to said axis; a plurality of steps (one step being "46" and another an adjacent portion of "44"; see Figs. 1, 3b and col. 4, lines 33-39) located on a leading side of each of said plurality of vanes; and a plunger (36 which is a component of 30) movably mounted with said chamber (see col. 3, lines 41-48), said plunger movable along said axis to telescope of said mixer (see col. 3, lines 33-48). Regarding claim 13, said plurality of vanes extend longitudinally along a longitudinal length of said mixer (see Fig. 6). Regarding claim 14, said plurality of steps are located on one side of each

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of said plurality of vanes (see Figs. 1, 3b and col. 4, lines 33-39). Note: in claim 14 it is considered that the phrase "steps are located on one side" does not preclude additional steps being located in other locations such as another side. Regarding claim 15, said one side of said plurality of vanes lead a direction of rotation of said mixer (see Figs. 1, 3b and col. 4, lines 33-39). Regarding claim 16, an inner configuration of said plunger corresponds with an outer configuration of said mixer (see Figs. 1, 3b and col. 4, lines 33-41).

Allowable Subject Matter

14. Claims 10 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The additional limitation of claims 10 and 17 "further comprising a rotationally fixed mixer, said plunger movable along said axis toward said exit port to telescope over said fixed mixer prior to telescoping over said mixer" is not disclosed by Solomon ('786), which is considered that closest prior art, nor is it rendered obvious by the prior art in combination with the limitations of the corresponding independent claims, 1 and 12 respectively. Additionally, if claim 11 is made to depend from claim 10, thereby providing proper antecedent basis for "said fixed mixer", it would also be allowable.

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Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in cursive script that reads "David Sorkin".

David Sorkin